Notes, Ideas, and Comparisons of LEPC Regional HazMat Plan Guidance Documents

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PURPOSE:

- The purpose of this document is to generate ideas and discussion about the LEPC Regional HazMat Planning Guidance document that will be generated as part of this project.
- Although the content of the Regional HazMat Plans is set by the legal requirements, the *format* of the guidance documents and the Regional HazMat Plans is important to their usability.

THE DOCUMENTS:

Two documents could result from this project: (1) Guidance for the LEPC to prepare a Regional HazMat Plan, and (2) Guidance for the SERC to review the Regional HazMat Plans.

1. LEPC Guidance: This document could include information on how to organize, operate, and evaluate an LEPC and how to prepare a Regional HazMat Plan, with examples and background materials, including:
   - Authorities, regulations, requirements
   - Job aids and forms
   - Description of roles
   - Concept of operations
   - Hazards analysis
   - Exercises and training
   - Documentation requirements
   - Funding
   - Community outreach
   - Identification and integration with other local, regional, state and national plans
   - Equipment and supplies
   - Sample forms
   - Suggestions/Best Practices
   - Definitions and acronyms
   - Resources
   - Links and contacts

   Template or Framework for LEPC Regional HazMat Plan: Alternatively, the LEPC Guidance document could be as simple as a *template* or *framework* that includes only the basics of what is required in an LEPC Regional HazMat Plan and can be structured to allow a fill-in-the-blanks approach. This could be an interactive, collaborative, online template, a simple

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downloadable template, or a hard-copy template. The template or framework could be structured to provide for the minimum, mandatory requirements of the basic plan, with add-ons for suggested additional functions.

2. SERC Review Tool: This document could be an aid for the SERC review of LEPC Regional HazMat Plans, including assessment of compliance with mandatory content. Depending on how the SERC wants to proceed, this could:
   - Be limited to a narrow assessment of whether the Regional HazMat Plans meet minimum, mandatory standards;
   - Include a section on how to measure LEPC performance;
   - Include an evaluation of not only that the minimum requirements are met, but also whether the Regional HazMat Plan could be implemented and is sufficient for the hazards presented.

   The SERC review tool could be a checklist format including information about how to evaluate the sufficiency of each topic. This could be hard copy or an interactive online format with links to background information about each required topic and to the Regional HazMat Plans and appropriate Area and Business Plans.

IMPORTANCE OF FORMATTING:

Given the multiple demands placed on limited resources, the format of the guidance documents (and the resulting Regional HazMat Plans) must be user-friendly, complete, and readily comprehended. The Regional HazMat Plans have to be especially easily accessible and useable in an emergency, with a very clear organization that places the operational information in the front of the document and the information that is important (but not useful in an emergency) to the rear.

Also understood, is that the format of the Regional HazMat Plans may be largely influenced by the requirements of other overlapping hazmat plans. In order to lessen the burden of plan preparation on LEPCs, plans, plan sections, or other components that have been prepared to fulfill other legal requirements but are substantially equivalent to the Regional HazMat Plan requirements should be accommodated. These may not be in a format that is optimal for emergency application or for SERC review, but unless the resources and funding issues are addressed, it may be needed.

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EXAMPLE GUIDANCE AND TEMPLATE DOCUMENTS:

The format of the LEPC Guidance (or the simplified Regional HazMat Plan Template/Framework) can be text, table, diagram, flowchart, and/or an interactive/collaborative online resource that customizes a Regional HazMat Plan when appropriate information is entered, or, a combination of formats depending on the topic. The California OES Hazardous Materials Toolkit is an example of a guidance resource that combines different formats effectively, although it does not have an interactive component.

There are several good examples of LEPC guidance documents that provide useful examples for creating California-specific guidance and for managing an effective LEPC, notably:

1. Texas Governor's Division of Emergency Management, Local Emergency Planning Committee (LEPC): A Primer for Local Planning for Hazardous Materials, July 26, 2006, 123 Pages.
2. Georgia Emergency Management Agency, LEPC Activities Guide, Volume 1, 2014, 33 Pages.
3. U.S. EPA, REGION 6, Local Emergency Planning Committee (LEPC) Handbook, June 2014, 249 Pages.
4. Additionally, the LA Mass Care document (Los Angeles Operational Area Alliance, Los Angeles Operational Area Mass Care Guidance for Emergency Planner**s**, December 15, 2010, 320 Pages) is a good example of a document that, although not directly related to Regional HazMat Plans, could be mimicked in its format and depth and breadth of pertinent topics.

These documents are assessed for their usefulness to this project below.

Another concept to consider is preparing a streamlined document with a fill-in-the-blanks approach that would generate a Regional HazMat Plan. The background information and useful annexes would not be included in the streamlined document, but this approach is easy-to-use and sufficient to meet mandatory requirements. The background information could be available separately in other documents or available online, as in the OES HazMat Toolkit.

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Please consider the following questions while reviewing the tables to follow:

1. Of the example documents and formats, which document best suits the needs of California LEPCs?
2. Do you think it is likely that LEPCs will use portions of plans that are already required for other regulatory purposes? If so, do you think that would drive the format of the Regional HazMat Plan?
3. How much information do you think is needed in the guidance document/template? Do you think it should be a streamlined document that is mostly a fill-in-the-blanks template (either hard copy or online) or a primer-type document that also offers background information about LEPCs and HazMat planning (for example, the Texas document)?
4. What questions do you want to be able to answer in the SERC review of Regional HazMat Plans? Should the SERC be interested in strict adherence to minimum, mandatory requirements, or should the SERC also consider adequacy to address the hazards in the region?

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Comparison of Guidance Documents

DOCUMENT TITLE	DOCUMENT DESCRIPTION	ASSESSMENT
Texas Governor's Division of Emergency Management **Local Emergency Planning Committee (LEPC): A Primer for Local Planning for Hazardous Materials** July 26, 2006 123 Pages	This document was prepared by the Texas Governor's Division of Emergency Management. Like California, Texas had hazardous material emergency laws in effect prior to the adoption of the federal EPCRA and this document describes both sets of laws related to the functions of the LEPCs. As background, the document characterizes the role of the LEPC as "a partnership between local government and industry as a resource for enhancing hazardous materials preparedness." And industry's role as "It is necessary for industry to be a part of this planning process to ensure facility plans are compatible with local emergency plans."	This document includes the information an LEPC needs to organize and function. It describes a useful working management structure for an LEPC, including subcommittee functions, bylaws, meetings, and recordkeeping. The document contains a section that describes the attributes of a successful LEPC, including: • Clearly defined goals; • Training in the legal basis of the LEPC and knowledge about what is expected of them; • Comprised of the people with responsibilities and interests from broad-based community representation; • Maintain a working relationship state and federal agencies responsible for their program, and with peers from other LEPCs; • Meetings that are scheduled at regular and convenient times; • Meetings that adhere to the agenda and are concerned with common interests; and,

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DOCUMENT TITLE	DOCUMENT DESCRIPTION	ASSESSMENT
	This document can be found online at: http://www.txdps.state.tx.us/dem/CouncilsCommittees/lepc/lepc_handbook_texas_07262006.pdf	• Strong leadership and designated staff. The document has a good format, and presents information on EPCRA and State law, LEPC duties and organization, reporting requirements for businesses, emergency planning requirements and reviews, community-level hazards analysis, and training and exercises. There is a section on LEPC role in hazmat response options, including training, coordination, and funding. The document includes some template-ready forms and plans. The document contains extensive, useful appendices, including: • Planning Principles and Perils: A Guide to Effective Planning • Hazardous Materials Planning Standards and Criteria • Sample LEPC Bylaws and Rules • Examples of LEPC Support/Funding Sources • State and Federal Hazardous Materials Reporting Requirements • Computer Applications in Hazardous Chemical Emergency Management • Community Awareness and Outreach

This document has useful information in a functional format. It can be used and modified, in whole or in part, as the basis for a California-specific guidance document.

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DOCUMENT TITLE	DOCUMENT DESCRIPTION	ASSESSMENT
		• National Response Plan • National Incident Management System (NIMS) • National Response System/National Oil and Hazardous Substances Pollution Contingency Plan (NCP)
Georgia Emergency Management Agency **LEPC Activities Guide, Volume 1** 2014 33 Pages	This document was prepared by the Georgia Emergency Management Agency. It was developed by examining best practices throughout Georgia in order to assist LEPCs in meeting the requirements of EPCRA. The document contains three sections: 1. Activities 2. Outreach 3. Exercises This document can be found online at: www.gema.ga.gov ***This document has useful information in a functional format. It does not provide the detail of the Texas or EPA Region 6 documents, but it can be modified to include the level of guidance needed for a California-specific guidance document.***	This document is in a very approachable format, with explanatory information in the main text and "helpful tips" and convenient diagrams in sidebar text boxes. The document includes instructions, examples, and background explanatory materials. The document explains that the guidance materials should be modified to fit the needs and resources of each region. The **Activities** section contains information on how to assess each community's unique vulnerabilities, including demographic information and potential hazmat exposures. For example, steps in a vulnerability assessment and a commodity flow study are described, although detailed instructions are not provided. The **Outreach** section provides instructions and examples on how to engage the community using events that will enhance the community's knowledge, preparedness, and resilience. For example, the document

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DOCUMENT TITLE	DOCUMENT DESCRIPTION	ASSESSMENT
		provides instructions on holding a community HazMat Expo. Samples of outreach materials are provided. The **Exercise** section provides specific instructions on drills and exercises. Types of exercises are described. A convenient table compares the different types of exercises and drills. Examples and a discussion of each type are provided. Again, the text-based information is accompanied by explanatory, sidebar text boxes, diagrams, and pictures. Simple sample scenarios are provided.
U.S. EPA, REGION 6 **Local Emergency Planning Committee (LEPC) Handbook** June 2014 249 Pages	U.S. EPA Region 6 has prepared and periodically modified a guidance document for LEPCs in its region. The document states that the "role of LEPCs is to form a partnership with local governments and industries as a resource for enhancing hazardous materials preparedness." And, "The LEPCs are the link between citizens, industry, and the government." This document can be found online at: http://www.rrt6.org/Uploads/Files/REGION%206%20LEPC%20Handbook%20--	This document is a handbook that is intended to be modified for specific LEPC regions within Region 6. The format of this document is two-column text-based with occasional tables. The document contains valuable and extensive information; however, the format is not as immediately approachable as the Georgia example. The document contains information about LEPC organization and activities – responsibilities; structure; and performance of LEPC duties. This includes information about requirements for meetings, administration, maintenance of records, public inquiries, funding, and tort liability. This document describes the relationship that EPCRA has created

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DOCUMENT TITLE	DOCUMENT DESCRIPTION	ASSESSMENT
	%20July%201,%202014.pdf	between government, industry, and the community. One document section describes reporting requirements for fixed facilities. There is detailed information on emergency plan development, including identification of facilities and transportation routes; hazards analysis; response methods, notification procedures; identification of the occurrence of a release and determination of the area/population affected by a release; determination of needed resources; and reviewing and testing the LEPC plan. There is a section that highlights the roles and responsibilities of each stakeholder with regard to hazmat accident prevention, preparedness, and response. The document contains a section providing lessons learned from hazmat incidents in Region 6. One section contains information from NASTPO about the overlap between similar laws, including EPCRA, CFATS, and RMP. The document provides detailed information about risk communication for LEPCs, including requirements, reasons to release information early, working with the press, how to maintain credibility, and handling media inquiries.
	This document has extensive, useful information. Its format is not as immediately approachable as the Georgia document, but is a good example of a document that can serve as a model for a California-specific guidance document.	

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DOCUMENT TITLE	DOCUMENT DESCRIPTION	ASSESSMENT
		Hazard analysis for stationary and mobile sources is described, including example of high-profile events. The appendices contain valuable information and include: • The text of EPCRA • Text of Region 6 state EPCRA statutes. • EPCRA regulations • NIMS requirements for LEPCs • Sample LEPC by-laws • LEPC regional hazmat planning principles • Checklist of planning standards • A description of the suggested mission, purpose, and function of an LEPC • A description and general overview of a hazards analysis • A description and general overview of conducting a transportation commodity flow study, with a link to a comprehensive report on how to conduct such a study • Suggestions on how to hold effective LEPC meetings • A checklist for evaluating LEPC performance • Sample forms • Sample public notices and press releases • Planning standards checklist for EPCRA compliance • Comparison of protective actions (evacuation vs. shelter-in-place • Criteria for reviewing hazmat plans

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DOCUMENT TITLE	DOCUMENT DESCRIPTION	ASSESSMENT
Los Angeles Operational Area Alliance **Los Angeles Operational Area** **Mass Care Guidance For Emergency Planners** December 15, 2010 320 Pages	This document is not an LEPC regional planning document. It was created as a tool to help planners establish strategies, plans, and procedures for providing mass care support to people affected during and after a catastrophic event. The document is reviewed here because it may offer a useful formatting example and detailed information to consider in developing California-specific LEPC HazMat Regional Planning Guidance. This document is intended to facilitate multi-county response to regional incidents and, in that way, is similar in scope to an LEPC document.	This document has a text-based format with occasional call-out text boxes, diagrams, or tables for highlighted information. The document contains detailed information that would be desirable in an LEPC HazMat Plan, including: • A thorough explanation of the roles of all stakeholders in a large regional, multi-county, multi-agency catastrophic event. • Detailed information on vulnerable populations. • Considerations of identifying, obtaining, storing, and allocating resources. • Provision of information. • Transition to recovery. The document contains extensive annexes, whose subjects and information would be useful in preparing an LEPC HazMat Regional Plan, including: • Companion, livestock, and exotic animal considerations. • Medical, health, and mental health considerations. • Shelter guidance. • Transportation management. • Legal mandates. • Demographics of the target region. • Sample forms and assessment checklists.

This document has extensive, useful material. Its text-dense format is not as immediately approachable as the Georgia document, but it contains information and a breadth of topics that would be valuable in preparing a California-specific guidance document.

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DOCUMENT TITLE	DOCUMENT DESCRIPTION	ASSESSMENT
		• Exhaustive inventory lists, including supplies for vulnerable populations. • Resources identification. • References with online links.

FORMAT EXAMPLES:

This section provides examples of different types of formatting that can be useful in preparing guidance documents. Only a few of the required elements of an LEPC Regional HazMat Plan are used as examples.

EXAMPLES OF FORMATS FOR PRESENTING LEGAL REQUIREMENTS:

Here is an example of a table-based format showing the requirements of three overlapping laws – CFATS, EPCRA, and RMP. The points of comparison include: facilities regulated, chemicals and thresholds regulated, and reporting requirements. (From National Association of SARA Title III Program Officials, NASTTPO Guidance on CFATS Emergency Planning, January 13, 2008).

	Department of Homeland Security	EPCRA (SARA Title III)	RMP (Clean Air Act)
Facilities Regulated	**Overview:** Facilities are regulated based on their classification as "**high risk facilities**," which *may* be determined by the presence of threshold quantities of certain chemicals, within the broad categories of: toxics, explosives, flammables, CW/CWP, sabotage/contamination chemicals, mission critical chemicals, and economically critical chemicals. **Definition:** "Chemical Facility or facility shall mean any establishment that possesses or plans to possess, at any relevant point in time, a *quantity of a chemical substance* determined by the Secretary to be potentially dangerous or that meets other *risk-related criteria* identified by the Department. As used herein, the term chemical facility or facility shall also refer to the owner or operator of the chemical facility. Where multiple owners and/or operators function within a common infrastructure or within a single fenced area, the Assistant Secretary may determine that such owners and/or operators constitute a single chemical facility or multiple chemical facilities depending on the circumstances." 6 C.F.R. § 27.105 (2007) (emphasis added).	**Overview:** Generally, the requirements for emergency planning and reporting apply to any facility that has quantities of chemicals on the list of lists that are above threshold levels. The requirements for emergency release notification apply to any facility where a hazardous chemical is used, produced or stored, or where there is a release of a hazardous chemical or CERCLA substance. 40 C.F.R. § 355.40 (2007) (noting exceptions). **Definition**: Facility means all buildings, equipment, structure, and other stationary items that are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with, such person). Facility shall include manmade structures in which chemicals are purposefully placed or removed through human means such that it functions as a containment structure for human use. For purposes of emergency release notification, the term includes motor vehicles, rolling stock, and aircraft. 40 C.F.R. § 355.20 (2007).	**Note:** The Clean Air Act uses the term **"stationary source"** rather than **facility** in its statutory provisions. Thus, these provisions apply to an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process. 40 C.F.R. §68.10 (2007). **Definition:** Stationary source means any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this part. A stationary source includes transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source for loading or unloading. Transportation includes, but is not limited to, transportation subject to oversight or

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Another example of the same information is found in the May 2014 EPA Region 6 LEPC Handbook.

Facilities Regulated	
DHS	Overview: Facilities are regulated based on their classification as "high risk facilities," which is determined by the presence of threshold quantities of certain chemicals, within the broad categories of: toxics, explosives, flammables, CW/CWP, and sabotage/ contamination, mission critical, and economically critical chemicals. Definition: "Chemical Facility or facility shall mean any establishment that possesses or plans to possess, at any relevant point in time, a quantity of a chemical substance determined by the Secretary to be potentially dangerous or that meets other risk-related criteria identified by the Department. As used herein, the term chemical facility or facility shall also refer to the owner or operator of the chemical facility. Where multiple owners and/or operators function within a common infrastructure or within a single fenced area, the Assistant Secretary may determine that such owners and/or operators constitute a single chemical facility or multiple chemical facilities depending on the circumstances." 6 C.F.R. § 27.105 (2007). For exceptions to facilities regulated because of coverage by other laws, see 6 C.F.R. § 27.110 (2006). Designation: The Assistant Secretary has the discretion to designate a facility as "high risk" at any time based on the information available, or may request information through publication in the Federal Register or through direct contact with a facility. See 6 C.F.R. § 27.200 (2007). Note: Any facility that does not respond to a request for information may be presumed a high risk facility. "ACG" – A Commercial Grade "APA" – A Placarded Amount "STQ" – Screening Threshold Quantity
EPCRA	Overview: Generally, the requirements for emergency planning and reporting apply to any facility that has quantities of chemicals on the lists above threshold levels. The requirements for emergency release notification apply to any facility where a hazardous chemical is used, produced or stored, or where there is a release of a hazardous chemical or CERCLA substance. 40 C.F.R. § 355.40 (2007) (noting exceptions). Definition: Facility means all buildings, equipment, structure, and other stationary items that are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with, such person). Facility shall include manmade structures in which chemicals are purposefully placed or removed through human means such that it functions as a containment structure for human use. For purposes of emergency release notification, the term includes motor vehicles, rolling stock, and aircraft. 40 C.F.R. § 355.20 (2007).
RMP	Note: The Clean Air Act uses the term "stationary source" rather than facility in its statutory provisions. Thus, these provisions apply to an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process. 40 C.F.R. §68.10 (2007). Definition: Stationary source means any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this part. A stationary source includes transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source for loading or unloading. Transportation includes, but is not limited to, transportation subject to oversight or regulation under 49 CFR parts 192, 193, or 195, or a state natural gas or hazardous liquid program for which the state has in effect a certification to

One more example of presenting information about the legal basis in a table-based format is taken from the California OES HazMat Toolkit.

The following table outlines the six emergency plans and the applicable statutory and regulatory references:

Emergency Plan Required	Program Element	Statutory Reference	Regulatory Reference
Business Plan	Business Plan Program	H&SC, Chapter 6.95, Article 1	19 CCR § 2729-2732
Contingency Plan	Hazardous Waste Generator/Tiered Permitting Program	H&SC, Chapter 6.5	22 CCR § 66264.24 - § 66264.25
Spill Prevention Control & Countermeasure Plan	Above Ground Storage Tank (AST) Program	H&SC, Chapter 6.67, § 25270.5	40 CFR, Part 112
Marine Facility Oil Spill and Vessel Contingency Plans	Oil Spill Prevention and Response Program	Government Code (GC) § 8670.29 & § 8670.31	14 CCR § 815.01 - § 817.02
Accident/Spill Prevention Plan	Underground Storage Tank (UST) Program	H&SC, Chapter 6.7	23 CCR § 2632(d)
Risk Management Plan	California Accidental Release Prevention Program (CalARP)	H&SC, Chapter 6.95, Article 2	19 CCR § 2745.8

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A text-based format, which includes relevant sections from the applicable laws (taken from California Governor's Office of Emergency Services, Summary of Laws and Regulation for Hazardous Material Area Plans, February 26, 2014), is shown below.

Summary of Hazardous Material Area Plan Requirements

Section 1

Statutory Requirements for Hazardous Material Area Plans

Excerpts from: CALIFORNIA CODES
HEALTH AND SAFETY CODE
SECTION 25500-25519

Legislative Intent

25500. The Legislature declares that, in order to protect the public health and safety and the environment, it is necessary to establish business and area plans relating to the handling and release or threatened release of hazardous materials. The establishment of minimum statewide standards for these plans is a statewide concern. Basic information on the location, type, quantity, and the health risks of hazardous materials handled, used, stored, or disposed of in the state, which could be accidently released into the environment, is not now available to firefighters, health officials, planners, public safety officers, health care providers, regulatory agencies, and other interested persons. The information provided by business and area plans is necessary in order to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of hazardous materials into the workplace and environment.

The Legislature further finds and declares that this chapter does not occupy the whole

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EXAMPLES OF FORMATS FOR HAZARDS ANALYSIS:

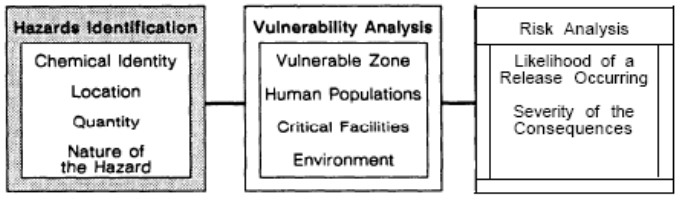
Here are examples of text-based guidance on hazards analysis (taken from EPA's 1987 Technical Guidance for Hazards Analysis, Florida's SERC/LEPC online page, the Texas 2006 LEPC Primer, and the EPA Region 6 2014 LEPC Handbook).

2. Hazards Analysis: An Overview

This chapter provides an overview of hazards analysis as it relates to emergency planning for extremely hazardous substances (EHSs) under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). The approch to hazards analysis presented here is not mandatory but it will assist localities in meeting the planning requirements of SARA Title III. As in Chapter 1 this chapter follows the same general format and supports the principles presented in NRT-1. It represents a relatively simple yet effective means of evaluating potential hazards resulting from the accidental release of an EHS. The three basic components in the hazards analysis discussed here are (1) hazards identification, (2) vulnerability analysis, and (3) risk analysis.

The step-by-step process planners should follow in conducting a hazards analysis is outlined in Exhibit 2-1 1 (pp. 2-26 and 2-27) and described in detail in Chapter 3. The overview in this chapter should be carefully read and understood before attempting an actual hazards analysis as outlined in Chapter 3. The information in Appendices I and J should also be reviewed.

2.1 Hazards Identification



Hazards identification, the first step in hazards analysis, is the process of collecting information on:

- The types and quantities of hazardous

This information can be used by emergency planners, as well as by fire/rescue services, police departments, and environmental protection departments as they prepare for, respond to,

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floridadisaster.org/hazmat/SERC/HazardAnalysesTechGuidance.htm

FloridaDisaster.org
Florida Division of Emergency Management

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Prepare and Stay Aware!

FL Hazard Lookup

Florida STATE EMERGENCY RESPONSE COMMISSION for hazardous materials

Technical Guidance for Hazard Analyses

A hazard analysis must be completed for each facility reporting the presence of one or more Extremely Hazardous Substances (EHSs) above the established threshold planning quantity (TPQ). Facilities requiring a site-specific hazard analysis are listed as an attachment to the contract between the State of Florida and the recipient. The data that is required to be included in each facility's hazard analysis is explicitly stated in the Scope of Work of the contract; items listed in the Scope of Work follow with discussion where appropriate for clarification or emphasis.

Technical assistance for CAMEO is provided by Gary Hilbert. His toll free telephone number is 1-800-992-2636 or E-mail address is cameo@cameosupport.com.

Facility Information

Facility name and physical address: A Post Office Box does not indicate physical location and thus is not acceptable; similarly, greater detail than a highway name (e.g., "State Road 20 North") must be provided in order that responders may locate the facility. Mailing addresses will generally be included for the parent company or owner/operator in the appropriate section of the report.

Facility Emergency Coordinator: Provide the name, title and telephone number (day and 24-hour) of the designated facility coordinator.
This individual is the facility representative who should be contacted in the event of an emergency.

Transportation Routes: List the main routes used to transport chemicals to the facility.
Indicate the mode of transportation if other than road delivery (rail line, air etc.). It is understood that road deliveries of chemicals may vary based upon delivery schedules and other factors; simply list those possible road segments from the county line and in the immediate vicinity of the facility. Statements such as "local and state highways" and "route varies with carrier/driver" are not acceptable.

Evacuation routes: Based on wind direction (North, South, East, West), identify the route(s) downwind to exit the vulnerable zone.
In determining evacuation routes, consider local road system characteristics and traffic flow patterns, road capacities and connections to primary roads where appropriate. The goal of this process is to ensure that routes away from the path of the chemical plume are pre-identified for the most likely and worst-case scenario.

Facility Identification: SERC code and geographic coordinates.
The SERC code is the bottom number next to the facility name on the contract attachment that lists the facilities for which a hazard analysis must be performed. Geographic coordinates should be indicated in latitude/longitude format.

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B. Hazards Analysis

1. General

As you will notice while reading the state criteria for developing a hazardous materials response annex (Annex Q), some of your key tasks will be to identify facilities containing extremely hazardous substances or to identify transportation routes likely to be used for the transportation of these substances. A hazard analysis will help you identify these and other hazards in your community.

Planners should try to answer the following questions:

- What are the major chemical hazards in our community?
- What are the area(s) or population(s) likely to be affected by a release?
- What emergency response resources (personnel and equipment) does the community have/need?
- What kind of training do local responders need?
- How can we help prevent chemical accidents?
- The hazards analysis process described below can assist local planners in answering these and other important planning questions. The three basic references used for hazards analysis are:
  - ► *Off-site Consequences Analysis Guidance*: EPA CEPPO;
  - ► *Handbook of Chemical Hazard Analysis Procedures*, FEMA/U.S.DOT/ EPA; and
  - ► *Technical Guidance for Hazards Analysis*, FEMA/U.S. DOT/EPA

SECTION 12. Facility Hazard Analysis

This section was developed for EPA by Bob Campbell, President, Alliance Solution Groups, who specializes in hazardous materials response exercises, and conducting facility hazards analyses.

Each year, we witness several high-profile chemical incidents, such as at the West Fertilizer Plant, TX (Apr 17, 2013), Geismar, LA (Jun 13, 2013), and a Blue Rhino Plant in Lake County, FL (Jul 29, 2013).

Each of these incidents involved fire and/or subsequent explosion of the hazardous materials stored on site. In 2012, 12,073 hazardous material releases from fixed facilities and storage tanks were reported to the National Response Center nationwide (3,373 releases from facilities in Region 6).

These and other scenarios, highlight the need for all-hazards planning and evaluation of the fate and transport of the hazardous materials. Despite regulatory gaps, LEPCs, Fire Departments and Emergency Managers need to recognize and anticipate the potential hazards associated with facilities in their communities in order to adequately prepare for, respond to and recover from these incidents.

This section will highlight a community's approach to conducting all-hazards planning which results in an

following website: http://www.fmcsa.dot.gov/safety-security/hazmat/national-hazmat-route.aspx. Review the PHMSA transportation statistics and commodity information at (http://www.phmsa.dot.gov/hazmat/library/data-stats). This site includes national statistics, statewide statistics and local commodity flow studies, where available.

Railroads: Determine which railroads transit the community and contact the railroad hazardous material manager to obtain the commodity flow.

Waterways: We have had success in working with port authorities in collecting both quantitative and general qualitative data about specific commodities transiting ports.

Airports: Air safety has significantly improved over the years and likelihood of an incident resulting in a release of hazardous materials is extremely low but worth investigating with the airport authority or port operations.

Pipelines: Communities that have pipelines typically transport petroleum, natural gas, and/or ammonia. Pipeline owners may be able to provide maps of their pipelines to planners.

Stationary Sources:

Chemical Hazards: Stationary sources comprise approximately 70% (NRC statistics, 2012) of hazardous

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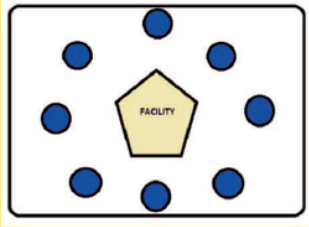
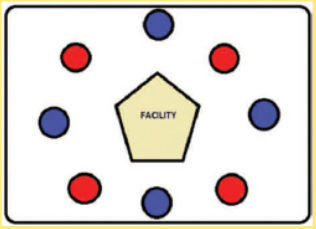
Here is a page from the Georgia 2014 LEPC Guidance document that is text-based, but in a format that is approachable.

WHAT IS THE DIFFERENCE BETWEEN RISK AND VULNERABILITY?

RISK: The potential for loss due to a hazard. For example, all individuals below in Figure 1 (represented by circles) living near a chemical facility are at risk of harm should there be an incident at the facility.



VULNERABILITY: Certain characteristics about a person, place, or thing that increase their hazard risk. For example, imagine that some of those individuals at risk suffer from some sort of respiratory illness. Those individuals, represented below in red, would be considered vulnerable because of the characteristics that increase their risk when compared to others in a similar situation.



5. Collect information about the vulnerable populations you have identified.
   - Do they need assistance in understanding emergency warnings? (e.g. the elderly or non-English speakers)
   - Would they need more assistance during an evacuation? (e.g. people without transportation or homebound individuals)
   - Might their health be compromised quicker than others? (e.g. children and hospital patients)
6. Develop strategies and policies to protect vulnerable facilities and individuals.
   For example:
   - What kind of mutual aid agreements are in place to assist with the evacuation of hospitals and nursing home facilities?
   - How can transportation be provided to evacuate people who don't own a car?
   - Can public service announcements be translated into other languages before a disaster occurs?
   - What kind of early warning systems can be put in place for hospitals, schools, nursing homes, etc.?
7. Implement strategies to reduce vulnerability and increase hazard resilience of the community as a whole.

Activity: Commodity Flow Study (CFS)

Introduction
Most communities are origins, destinations, or through-routes for hazardous materials. In order to plan and prepare for possible incidents related to hazmat transportation, LEPCs need basic data on the types and quantities of chemicals transported through the jurisdiction. A commodity flow study identifies the goods and commodities that are being transported through a particular area.

Purpose:
A Commodity Flow Study (CFS) provides critical information to the emergency planning process—specifically: understanding the situation, determining goals and objectives, and developing a plan. Results can be used to analyze current traffic patterns, focus planning efforts on existing

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There are several variations of a risk matrix-approach to understanding and classifying hazards. Here is a classic example that could be modified to be applicable to Regional HazMat Planning.

Classic Hazard Level Matrix

LIKELIHOOD	SEVERITY: I Catastrophic	II Critical	III Marginal	IV Negligible
A Frequent	I-A	II-A	III-A	IV-A
B Moderate	I-B	II-B	III-B	IV-B
C Occasional	I-C	II-C	III-C	IV-C
D Remote	I-D	II-D	III-D	IV-D
E Unlikely	I-E	II-E	III-E	IV-E
F Impossible	I-F	II-F	III-F	IV-F

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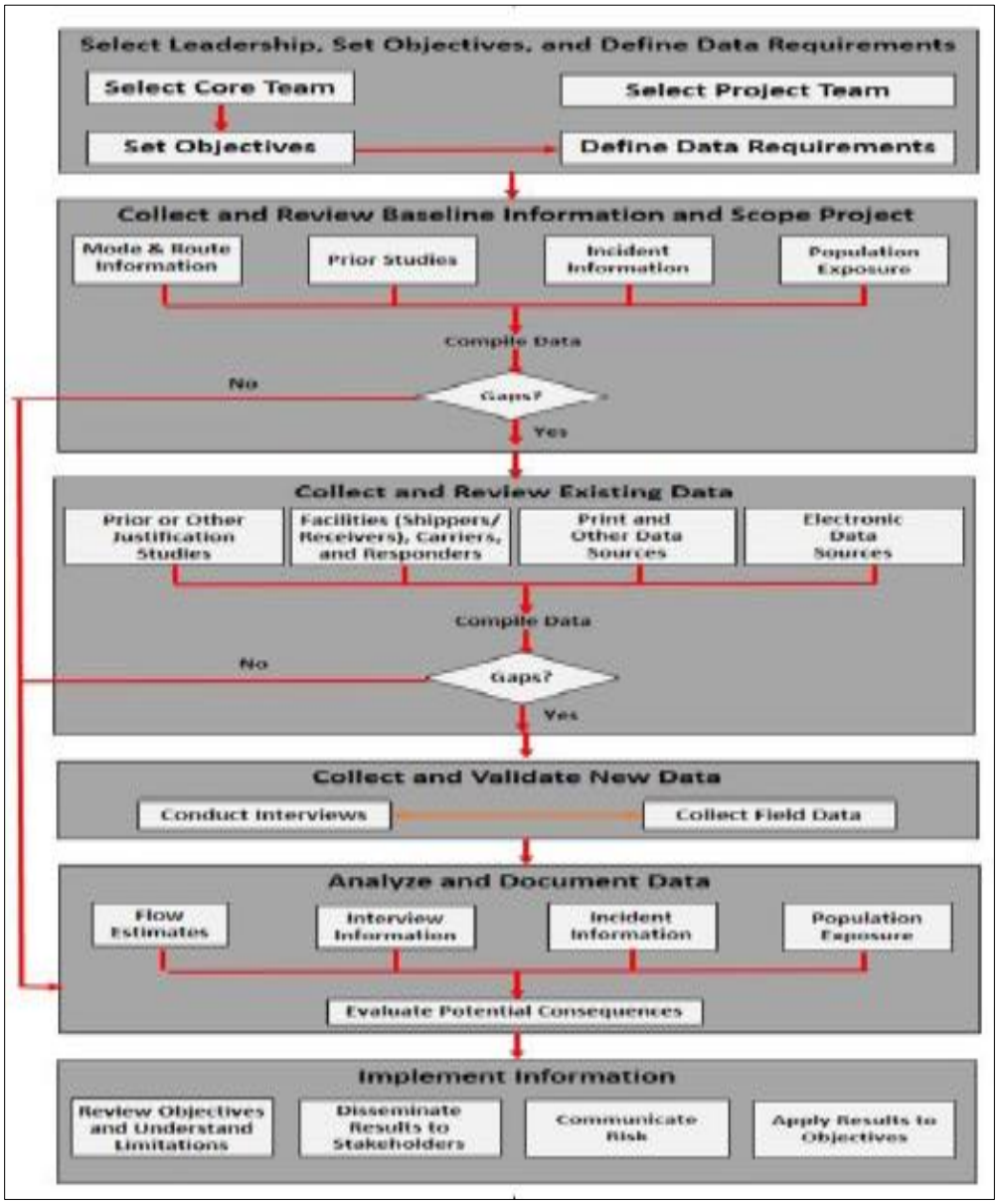
There are also flow-chart formats for understanding and classifying hazards that could be modified for Regional HazMat Planning. Here is an example of a flowchart from the EPA Region 6 LEPC Handbook.



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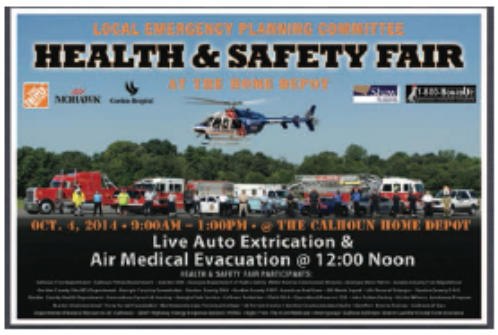
EXAMPLES OF FORMATS FOR COMMUNITY OUTREACH:

The Georgia LEPC Activities Guide has a format that combines text with pictures, diagrams, sidebar suggestions, tables, and examples. The layout makes it easy to use. Here is an example in the discussion of community outreach.



Helpful tip: Carefully choose a date and time free of conflicts and potential weather issues.

6. Send out letters and posters to local community organizations in hopes that they will distribute the information.
   - Create flyers, brochures, campaign signs and have each LEPC member distribute a specific amount.
   - A sample letter and flyer can be found on the following page.
7. Visit Ready Georgia at www.ready.ga.gov for useful community materials and information.

Outreach: Reporting Seminar

Purpose
The purpose of a reporting seminar (or workshop) is to familiarize your LEPC and first responders with the requirements for reporting hazardous materials, as stated in the Emergency Planning and Community Right-to-Know Act (EPCRA).

What is E-Plan?
E-Plan is an electronic database where industries can report what kinds of chemicals they have and contact information for their emergency coordinators. It is a large database of facility data, including: Tier II reports, maps of the area surrounding a fixed facility, Material Safety Data Sheets (MSDSs), emergency response guidebook references, facility risk management plans, and more.

You can access E-Plan at https://erplan.net

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EXAMPLES OF FORMATS FOR EXERCISES AND DRILLS:

The Georgia LEPC Activities Guide has a format that combines text with sidebar suggestions, tables, and examples. The layout makes it easy to use. Here are three examples in the discussion of exercises and drills.

	Utility/Purpose	Type of Player Action	Duration	Real-Time Play?	Scope
Discussion-Based Exercises	Familiarize players with current plans, policies, agreements, and procedures; develop new plans, policies, agreements, and procedures	Notional; player actions are imaginary or hypothetical	Rarely exceeding 8 hours	No	Varies
Seminar	Provide overview of new or current plans, resources, strategies, concepts or ideas	N/A	2-5 hours	No	Multi- or Single-agency
Workshop	Achieve specific goal or build product (e.g., exercise objectives, SOPs, policies, plans)	N/A	3-8 hours	No	Multi-agency/ Single function
Tabletop Exercise (TTX)	Assist senior officials in the ability to understand and assess plans, policies, procedures, and concepts	Notional	4-8 hours	No	Multi-agency/ Multiple functions
Game	Explore decision-making process and examine consequences of those decisions	Notional	2-5 hours	No (though some simulations provide real- or near-real-time play)	Multi-agency/ Multiple functions
Operations-Based Exercises	Test and validate plans, policies, agreements, and procedures; clarify roles and responsibilities; identify resource gaps	Actual; player action mimics reaction, response, mobilization, and commitment of personnel and resources	May be hours, days, or weeks, depending on purpose, type, and scope of the exercise	Yes	Varies
Drill	Test a single operation or function of an agency	Actual	2-4 hours	Yes	Single agency/ Single function
Functional Exercise (FE)	Test and evaluate capabilities, functions, plans, and staffs of Incident Command, Unified Command, intelligence centers, or other command/operations centers	Command staff actions are actual; movement of other personnel, equipment, or adversaries is simulated	4-8 hours or several days or weeks	Yes	Multiple functional areas/ Multiple functions
Full-Scale Exercise (FSE)	Implement and analyze plans, policies, procedures, and cooperative agreements developed in previous exercises	Actual	One full day or several days or weeks	Yes	Multi-agency/ Multiple functions

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The Exercise Cycle

The National Incident Management System (NIMS) provides a cycle of preparedness, which is depicted below. As you can see, exercising is vital step in the preparedness process.

Within the preparedness cycle, HSEEP describes another cycle for exercising. The phases of exercising as described as a cycle because of the way that exercising is a constant process of improvement.

The Five Phases of the Exercise Cycle

1. Foundation: Create a base of support, develop a project management timeline, establish milestones, identify an exercise planning team, and schedule planning conferences.

2. Design and Development: Identify objectives, design the scenario, create documentation, coordinate logistics, plan exercise conduct, and select an evaluation and improvement methodology.

3. Conduct: Determine how the exercise will run. This includes setup, briefings, facilitation/control/evaluation, and wrap up activities.

4. Evaluation: Document strengths and weaknesses, write After Action Report.

5. Improvement Planning: Assign due dates to responsible parties to correct action items, track progress to implementation.

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THE SERC REVIEW TOOL/DOCUMENT:

The SERC Review Tool may be as simple as a checklist to determine if all of the mandatory requirements in an LEPC Regional HazMat Plan have been prepared. A more extensive document that includes background information (or links to an online source) to provide both context and to guide in assessing not only whether the Regional HazMat Plan has all of the required parts, but whether the plan will function as needed also should be considered. If the desire is to provide a simple, functional checklist-type tool, it may be very similar to what will be needed as a checklist for the LEPC to guide the preparation of the Regional HazMat Plan.

Here are examples – a checklist format and a text-based descriptive format to provide information about how to assess the minimum standards – taken from the EPA Region 6 2014 LEPC Handbook.

CRITERIA FOR PLANS	DOCUMENTATION	
1. INCIDENT INFORMATION SUMMARY		
The Plan should contain:	A.1	
a. Detailed description of the essential information that is to be developed and recorded by the local response system in an actual incident, e.g. , date, time, location, type of :release, and material released;		
2. PROMULGATION DOCUMENT		
The Plan should contain:		
a. A document signed by the chairperson of the LEPC, promulgating the plan for the district;	A.2	
b. Documents signed by the chief executives of all local jurisdictions within the district; and		
c. Letters from affected facilities endorsing the plan.		
The Plan might contain:		
d. Letters of agreement between the affected facilities and local jurisdictions for emergency response and notification responsibilities.	A.2	
3. LEGAL AUTHORITY AND RESPONSIBILITY FOR RESPONSE		
The Plan should:		
a. Describe, reference, or include legal authorities of the jurisdictions whose emergency response roles are described in the plan, including authorities of the emergency planning district and the local jurisdictions within the district; and	A.3	
b. List all other authorities the LEPC regards as essential for response within the district, including state and federal authorities.		
4. TABLE OF CONTENTS		
The Plan should:		
a. List all elements of the plan, provide tabs for each and provide a cross-reference for all of the nine required elements in Section 303 of the Act. Plans that are prepared in the context of requirements of SLG 101 should contain an index to the location of both NRT-1 and Section 303 elements.	A.4	
5. ABBREVIATIONS AND DEFINITIONS		
The Plan should:		
a. Explain all abbreviations and define all essential terms included in the plan text	A.5	
6. PLANNING FACTORS		
Assumptions: Assumptions are the advance judgments concerning what might happen in the case of an accidental spill or release		

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Description of Responsibility	Section / Paragraph
I. Authority & References	
Identifies those local, state, and federal legal authorities which provide a basis for carrying out actions detailed in this annex and pertinent references.	
II. Purpose	
Includes a mission or purpose statement that describes the reason for development of the annex.	
III. Explanation of Terms	
Includes a list of acronyms used in the annex and definitions of essential terms.	
IV. Situation & Assumptions	
A. Includes a situation statement describing potential hazards and factors affecting emergency planning and response.	
B. Provides summary of the local capability to response to hazmat incidents.	
C. Includes a list of assumptions used in planning.	
D. Identifies local regulated facilities and primary hazard(s) at such facilities.	
E. Identifies local transportation routes for hazardous materials, including any approved hazardous cargo routes.	
F. Identifies facilities (special facilities, population support facilities, and population concentrations) that may be vulnerable during a hazmat incident due to their proximity to regulated facilities or a hazmat transportation route.	
G. Includes a map showing the location of regulated facilities, hazmat transportation routes, and vulnerable facilities.	
H. Identifies evacuation routes from risk areas surrounding regulated facilities.	
I. Includes a format for receiving and disseminating essential information regarding a hazmat incident.	
V. Concept of Operations	
A. Describes the actions taken to mitigate a hazmat incident.	
B. Includes a hazmat incident classification scheme.	
C. Describes procedures for receiving timely reports of hazmat incidents.	
D. Describes methods for disseminating incident notification to local emergency response elements.	
E. Describes methods for determining the area of population affected by a hazmat release.	
F. Describes methods to determine appropriate protective actions for the public in the event of a hazmat incident.	
G. Describes procedures for warning the public of a hazmat incident and communicating appropriate protective actions.	
H. Describes obligations of the responsible party and of local government in the recovery from a	

APPENDIX T. Planning Standards Checklist for EPCRA Compliance

Section 303(a) of EPCRA requires each LEPC to prepare response plans. The LEPC is required to review the plan at least once a year.

LEPCs must evaluate the need for resources necessary to develop, implement, and exercise the plan, and to make recommendations with respect to additional resources that may be required and the means for providing these additional resources.

The plan shall include (but is not limited to) each of the following items below.

These requirements are incorporated into the State templates for the local all-hazard emergency operations plan.

- In Arkansas, Annex ESF-10 or Annex L of the local EOP addresses EPCRA planning requirements
- In Louisiana, Annex ESF-10 of the local EOP addresses EPCRA planning requirements.
- In New Mexico, Annex ESF-10 or Annex D of the local EOP addresses EPCRA planning requirements
- In Oklahoma, Annex Q of the local EOP addresses EPCRA planning requirements.
- In Texas, Annex Q of the local EOP addresses EPCRA

7) Evacuation plans, including provisions for a precautionary evacuation and alternative traffic routes.
8) Training programs, including schedules for training of local emergency response and medical personnel.
9) Methods and schedules for exercising the emergency plan.

GUIDELINES FOR SARA TITLE III PLANNING

Below is a set of guidelines for each SARA Item. Each set of guidelines provides:

- The EPCRA planning Item stated in full.
- The intent of the Item.
- Specification of information required.
- Recommendations are sometimes provided.

(1a) Identification of facilities subject to the requirements of SARA Title III, Section 302 within the LEPC.

Intent

The intent of this item is to identify for public safety information and planning purposes any high risk facilities